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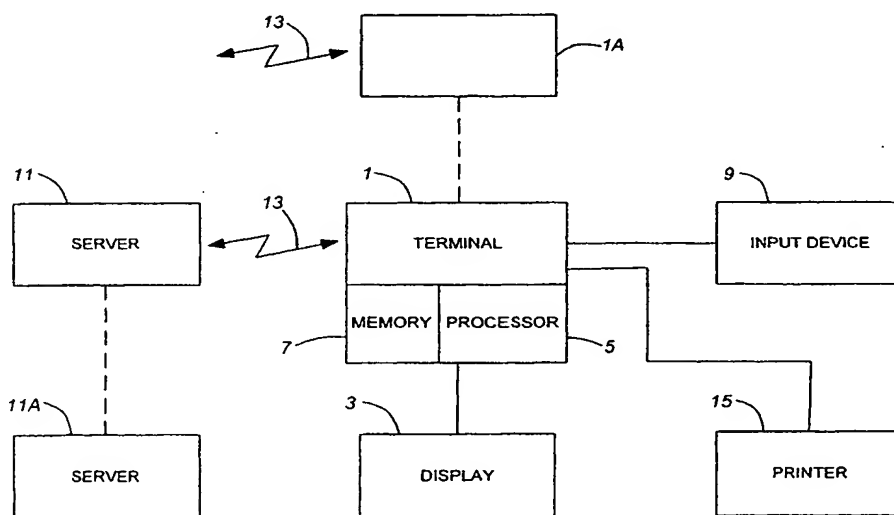
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(54) Title: METHOD OF ESTABLISHING A PROMOTION AT A POINT OF SALE TERMINAL

(57) Abstract: A method of operating an electronic promotion system, generating a database which tracks usage of marketing and advertising programs and allows for full audit capability. The method comprises inputting the identity of a promotion program, generating a unique identifier relating to the identity inputted and a transaction associated with the inputting, storing the unique identifier and the identity of the promotion in a database and authorizing provision of the promotion at the database.

1

METHOD OF ESTABLISHING A PROMOTION AT
A POINT OF SALE TERMINAL

FIELD OF THE INVENTION

5   This invention relates to a method of
establishing a promotion such as a discount or prize at
a point of sale terminal.

BACKGROUND TO THE INVENTION

         An important part of marketing and advertising
10 programs for some companies is capture of the attention
of customers at the point of sale, and to positively
influence their buying decisions. A widely used method
of influencing customer behavior at the point of sale is
to offer promotional programs that provide the customer
15 with the opportunity, for example, to win a prize or to
receive a variable discount at the time of purchase.
Scratch and win or scratch and save promotional games
are examples of this type of marketing program.

         However, the effectiveness of these programs for
20 companies is limited by their cost. A significant
amount of money must be invested in the production of
scratch cards that cannot be cheated, in distributing
these cards to individual households in a trading area,
tracking the redemption of the cards at the retail
25 level, and compiling of data that measures the
effectiveness of the programs. Because costs have been
found to be so high, the most effective point of sale
marketing and advertising programs have been limited to
larger organizations which have the resources to
30 effectively implement them.

SUMMARY OF THE INVENTION

         The present invention substantially reduces the
high cost of running marketing and advertising programs
at the point of sale. The present invention generates a

database which tracks usage of the programs, which allows full audit capability. It combines both delivery and redemption of a promotion at any terminal associated with the system. It can vary the value or form of

5 promotion that is provided to the customer, which can be tailored to the number or values of redemptions of particular types, the identities and/or purchase histories of customers asking for or being offered promotions or redemptions, the odds of winning a

10 particular prize or class of prizes, it can use the element of chance with controllable and variable odds to award a prize, etc. Because promotions can be stored in a memory, requests for redemption can be compared with what is stored, and thus substantially reduce the risk

15 of fraud. The identities and/or demographics of customers who use the system can be stored and associated with the promotions and redemptions, and thus the promotions can be tailored to maximize influence of purchasing decisions by the customers.

20   It is particularly noted that the promotions can be automatically offered on a chance basis at the point of sale terminal.

      Record of all of the above is automatically gathered and stored in the database, which can be

25 accessed on an ongoing basis or from time to time for evaluation purposes. The cost of operation of the promotion and redemption programs is thereby substantially reduced.

      The invention can be used in conjunction with

30 marketing and advertising programs of several companies, using a single database or several databases stored on a single server or on plural servers which are in communication with each other and/or with commonly available point of sale terminals, and thus it can be

operated by an independent operator which sells its services to various companies for various promotions.

In accordance with an embodiment of the invention a method of operating an electronic promotion system is comprised of inputting at a terminal the identity of a promotion, generating an unique identifier relating to at least one of the inputting of said identity and a transaction associated with said inputting of said identity, storing the identity of the promotion and the unique identifier in a database, and authorizing provision of the promotion at the terminal, whereby at least one of the identity of promotions, the number of requests for access to promotions and the number of promotions authorized to be redeemed may be retrieved from the database for assessment on an ongoing or accumulated basis.

In accordance with another embodiment, a method of operating an electronic promotion system is comprised of at a terminal, generating a request to a promotion awarding process, receiving the request and generating a promotion based on at least one of chance, a predetermined algorithm, values input at the terminal, and the existence of a predetermined fixed promotion, and authorizing provision of the generating promotion at a terminal.

BRIEF INTRODUCTION TO THE DRAWINGS

A better understanding of the invention may be obtained by reading the detailed description of the invention below, in conjunction with the following drawings, in which:

Figure 1 is a block diagram of a system on which the invention can be carried out.

DETAILED DESCRIPTION OF EMBODIMENTS OF THE INVENTION

Point of sale processor controlled terminals 1

are located at various locations, such as at retail
locations. The respective terminals can be based on a
personal computer, a computerized cash register, a
credit/debit card authorization terminal such as a
5   VeriFone Omni 396 transaction terminal, etc. The
terminal should have an output device by which it can
advise users with visual or voice information, such as a
display, a printer, a loudspeaker for providing audio
information, etc. All these output devices will be
10   referred to generically herein as a display 3, which is
driven by the terminal 1.

The terminal, besides having a processor 5,
should have memory 7 controlled by the processor 5.

An input device 9 is in communication with, or
15   is part of the terminal, and should be a well known type
which can capture numbers and symbols. For example, the
input device can be one or more of a keypad, a touch-
screen, a microphone which captures spoken numbers and
software in the terminal which interprets the spoken
20   numbers, a bar code or number scanner, etc.

The input and output devices and the terminal
itself could alternatively be an interactive voice
response system located on a remote computer, and which
is accessed by telephone.

25   The terminal is preferably in communication with
a server 11 via a communication link 13, which could be
a local area network, a wide area network, a telephone
network, a CATV system, a satellite link, a radio
transmission link, etc. The server can be located
30   either locally to one or more terminals, or remote from
the terminals.

The server can be in communication with other
servers 11A that are located at various geographic
locations. One of the servers, or an administrative

terminal (not shown), can be located at a head office,
from which databases at the servers can be accessed and
the information stored therein be downloaded, either
already compiled by one or all of the servers, for local
5   compiling, or for reading by an administrator.

It is preferred (but is not mandatory) that a
printer 15 is in communication with, and is controlled
by the terminal 1 if the server is remotely located, or
by the server if it is locally located.

10   In operation, a potential customer is encouraged
to visit a particular retailer or other location of a
terminal 1. The encouragement can be by distribution of
a printed piece in the form of a discount coupon or free
standing insert, a PIN or unique sequence of numbers if
15   radio or television is used, a mailing of a promotional
flyer, card coupon or form, a piece printed by the
customer after having accessed a particular internet
site and which carries a PIN or unique sequence of
numbers, etc., any of which designate a particular
20   retailer or class of retailers from which a promotion
can be redeemed. Alternatively, adverting may simply
encourage a visit to the location of a terminal to ask
for a particular promotion by name.

Wherever possible, and in particular in the case
25   in which the internet is used to deliver the media
campaign, visiting a site which hosts the campaign may
require entry of personal information and/or a PIN.
These pieces of information are subsequently used to
associate personal information with the campaign. The
30   pieces of information may be stored on a server which is
associated with the company providing the campaign. It
may also be stored in the memory of an integrated
circuit chip contained on a so-called "smart card"
carried by the user.

The user may download from the internet and print a promotional coupon or other piece, which preferably carries an unique bar code, sequence of numbers, and/or other data which identifies the

5   promotion, and possibly the user uniquely or as part of a group (e.g. conforming to particular demographics). Other promotional literature which a user can access from time to time (e.g. from a magazine, newspaper, mail delivery, etc.) can identify the user as part of a

10 group, and identify the promotion by bar code, a sequence of numbers, etc.

The server 11 should store sequences identical to those printed on the promotional literature or coupon.

15   In operation, a customer attends a terminal 1 and typically makes a purchase. If purchasing by credit card, debit card or smart card, the card is swiped or is otherwise read by an input device at the terminal. In this manner, the identity of the purchaser is captured

20 and is retained in the memory 7 of the terminal. Software in the memory of the terminal is used by the processor to control dialing out to obtain authorization for the transaction, in a well known manner.

In accordance with an embodiment of the present

25 invention, software in the terminal 1 causes the processor 5 to display a menu or the equivalent by display 3 which lists various promotions, and asks whether the transaction is associated with a particular promotion which is listed. Each promotion which is

30 displayed should be selected e.g. by number, by selection by a cursor, by highlighting the promotion, by voice enunciation, by touch screen, etc.

If the selected promotion has a required printed piece associated with it, the processor should cause

7

display of a request that the piece should be scanned, or that the unique number should be entered by keypad or touch screen. If the customer has no printed piece, but does have a PIN from a broadcast or internet campaign, the prompt should request that the PIN should be entered by keypad or touch screen.

If the promotion is a scratch and win or save type of promotion, the prompt should request that the appropriate number or series of numbers should be selected from the piece.

As these steps are being completed, the terminal captures and stores in memory 7 the swiped or read credit/debit/smart card data associated with the user and all of the entries by the user in response to the prompts. When all of the required entries have been completed, the processor controls the terminal to communicate with server 11 (e.g. by automatically dialing the server via a telephone network), and uploads the information to the server.

The server attempts to identify the user from the information which is uploaded, as provided by the credit/debit/smart card. If it does, this means that there was already a database file generated as a result of at least one previous transaction of this type by the user, or as a result of information stored on the server from that provided by an internet site or an associated bank or other entity.

Optionally, if the customer is identified, it may send a command to the terminal to display a request for the customer to enter a PIN, for certainty of identification. In this case, after or during entry of the PIN, it is uploaded to the server.

The identity of the promotion and optionally of the active terminal is then stored in the database in

8

association with the customer.

In the event the customer is not identified, a
new database record is created by the server, which
stores the customer identification, identification of
5   the promotion, and optionally the terminal.

It is possible that the customer cannot be
automatically identified, due to having paid for the
purchase in cash. In that case (and preferably in all
cases), the transaction is recorded at the server under
10 a number uniquely allocated by the server for that
transaction. The promotion identification code and the
unique transaction number is recorded in a general
transaction record in the database.

Entry of the above data to the server can be
15 considered to be a request for redemption of a promotion
which has been offered by the aforenoted printed or
broadcast advertising, on the internet, or at the point
of sale terminal. The server can record the request for
redemption as a count for the particular promotion
20 identified in the uploading, can record the request
against the identified requester, etc.

Now the server can respond to the request by
either of several steps.

It can authorize exact fulfilment of the
25 promotion by the terminal. In this case it should send
an authorization code or specific commands to the
requesting terminal, which causes display of the
premium, discount, prize, etc. to be given to the
customer, and preferably printout of a ticket with the
30 identifying transaction number.

It can access the database relating to the
identified customer to determine how many or what value
of purchases the customer has made which the system has
recorded. It can then adjust the promotional award,

9

e.g. by increasing a discount with increase in purchase
value or frequency of purchase. It should then send an
authorization code or specific commands to the
requesting terminal identifying the promotional award.

5   It can compare data such as numbers keyed in
from a scratch and win or save card with numbers stored
in its memory, to determine whether the numbers are
legitimate, and in order to further reduce fraud,
compare the numbers scanned from a bar code or otherwise
10   imprinted on the card with a corresponding code stored
in the server memory against winning numbers, and reject
the request if they do not match. It can also award a
value or type of premium depending on the particular set
of numbers provided.

15   It can compare numbers input by the user which
are acquired by contest, skill, or provided by an
internet site or at a retailer or other supplier (which
may have been randomly selected), with a set of numbers
stored by the server, and reject the request if they do
20   not match. It can also award a value or type of premium
depending on the particular set of numbers provided.

           It can send a message to the terminal to display
a request for the user to verify the numbers that have
been input, again to help avoid fraud. It can
25   alternatively or in addition, cause display of the
numbers that have been input, to obtain approval of the
numbers by the user by input of "yes/no" at the
terminal.

           It can compare the requested promotion
30   redemption with previous redemptions to determine
whether the values or characters of the redemptions are
becoming excessive with respect to a particular
criterion or to various criteria. For example, if the
promotion had initially been determined to allocate

quantities or values of premiums or awards in increasing
number with decreasing value, and if the number of
requests for redemption become excessive for a
particular value, based on a predetermined algorithm,

5   the system may reject the request for redemption or may
substitute other types of prizes, premiums, discounts,
etc., so that promoter would not lose money. Indeed, if
excessive requests for redemption from a particular
identified user is detected by the algorithm (e.g. in

10 excess of a particular threshold), there may be fraud
which was not detected by the other methods described
above, and the system may send a message to the terminal
to refuse further redemption to that identified user.

The data which is uploaded to the server may not

15 contain data identifying a particular promotional value.
In this case the server may randomly, or in accordance
with a particular algorithm, determine a prize such as a
discount, premium, etc, and download a command to the
terminal to display information identifying the prize.

20 The algorithm can take into account time of day,
identity and history of the customer (if the identity
has been provided), the history of the terminal, the
overall success of the campaign, how many of particular
types and/or values of prizes have been awarded, the

25 type of purchase, etc. In such cases, the incentive for
the customer to make the purchase would be to
participate in what appears to be an electronic "lucky
draw".

The server may download commands to the terminal

30 causing it to display a game, such as a request for the
customer to select one or a group of numbers out of a
larger group. The winning numbers can be randomly
determined by the server prior to, during or following
selection by the customer. Alternatively, the winning

11

numbers can be determined by the server in accordance
with an algorithm. Further, the character of and value
of the prize can be determined either randomly, in
accordance with a predetermined algorithm, past history
5   of the game or it can be present.

Once a set of numbers has been selected and
uploaded to the server, it selects identifiers of a
running set of numbers and prize and downloads a command
to the corresponding terminal to display information
10 regarding the prize.

Any other appropriate game, rather than the
numbers game described above, may be implemented in an
analogous manner.

Alternatively, simply making the purchase or
15 otherwise attending at the terminal and uploading the
data described earlier to the server, can cause the
server to select that data transaction as a winner or
loser by chance, by algorithm, by other selection, etc.,
without the user having a menu displayed or having to
20 select numbers or play a game.

Rather than downloading a game, the server can
download to the terminal an application engine which is
capable of generating data that can be used to create a
game upon receipt of a set of instructions downloaded or
25 otherwise provided to the terminal. On playing the game
(however obtained at the terminal), game selection
values are generated at the terminal. The game
selection values are uploaded to the server whereupon
the promotion can be authorized to the terminal.
30 Alternatively the promotion can be authorized at the
terminal. The game can be generated or stored at the
terminal as described above or from a local device such
as a CD ROM, a DVD, a ROM, a tape, etc.

All prizes, discounts, etc. referred to in this

12

specification should be construed to fall under the term
"redemptions".

It should be noted that while the above method
of operation has been described with reference to the
5   server, in case of small discounts and prizes it may be
preferable to do the redemption determination at the
terminal itself. In that case, the terminal may itself
be considered to be equivalent to the server.

The redemptions that have been authorized should
10   be stored in the record of the database in the server
relating to the identified user, and in a global record.
In addition, the time and day of the requests for
redemptions can be stored in the database, so as to be
able to determine busy/slow times and days, and
15   therefore allow adjustment of the advertising campaign
to best effect.

On an ongoing basis, or from time to time, an
administration terminal in communication with the server
should access the database, and can determine any on a
20   global basis, on an individual user basis, on a terminal
by terminal basis, or a time and day basis and on a
demographic basis the success of the program, as well as
the quantities and character and values of the
redemptions, the ebb and flow of purchases, etc.
25   Thus by use of a processor operated point of
sale terminal, inputting of information which is normal
to a sale, and in addition inputting of information
relating to a promotion if a promotion is offered,
results in the ability to automatically determine the
30   success of a promotional campaign, with regard to
demographics, with regard to individuals, with regard to
particular locations (since particular terminals can be
identified), to determine its resulting characteristics,
and to vary the values and types of redemptions which

13

are awarded and to gather redemption values for accounting purposes. Previously this type of information could not be automatically obtained with such precision.

5   At the same time, since redemptions are controlled from information stored at the server rather than from printed materials at the point of sale terminal which can be fraudulently printed or misinterpreted, fraud can be reduced.

10   A person understanding the above-described invention may now conceive of alternative designs, using the principles described herein. All such designs which fall within the scope of the claims appended hereto are considered to be part of the present invention.

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I Claim:

1. A method of operating an electronic promotion system comprising:

(a) inputting at a terminal the identity of a promotion,

5   (b) generating an unique identifier relating to at least one of the inputting of said identity and a transaction associated with said inputting of said identity,

(c) storing the identity of the promotion and
10   the unique identifier in a database, and

(d) authorizing provision of the promotion at the terminal,

whereby at least one of the identity of promotions, the number of requests for access to
15   promotions and the number of promotions authorized to be redeemed may be retrieved from the database for assessment on an ongoing or accumulated basis.

2. A method as defined in claim 1 including authorizing at least one of the character and value of the promotion based on at least one of chance, a predetermined algorithm, and the existence of a
5   predetermined fixed promotion.

3. A method as defined in claim 1 including storing a game at the terminal prior to authorizing provision of the promotion at the terminal, and on playing the game whereby game selection values are
5   generated, authorizing the promotion based on the game selection values.

4. A method as defined in claim 1 including

storing an application engine capable of generating data
that can be used to create a game upon receipt of a set
of instructions downloaded to the terminal, at the
5   terminal prior to authorizing provision of the promotion
at the terminal, and on playing the game whereby game
selection values are generated, authorizing the
promotion based on the game selection values.

5.   A method as defined in claim 1 in which the
identity of the requested promotion is automatically
generated at the terminal.

6.   A method as defined in claim 1 in which the
identity of the requested promotion is automatically
generated at the terminal as a generic request for
access to a promotion awarding process.

7.   A method as defined in claim 6 in which the
generic request results from reading a card identifying
at least one of a user of a promotion and of an
advertiser in a card reader.

8.   A method as defined in claim 1 in which the
unique identifier is at least one of an identifier of
the customer and an automatically generated identifier
of a transaction.

9.   A method as defined in claim 1 in which the
identity of the promotion is a series of numbers
obtained by scanning a printed bar code from a piece of
promotional material or from a broadcast medium or
5   internet site.

10.   A method as defined in claim 9 including

16

inputting the unique identifier by reading a personal identifier from a personal storage medium.

11. A method as defined in claim 10 in which the personal storage medium is at least one of a card carrying personal identification of the customer printed thereon or recorded in a magnetic strip or is a
5 memory of an integrated circuit chip, a smart card or a personal digital assistant device or computer, and further including the step of reading the printed identification, the magnetic strip or memory of said chip, smart card or personal digital assistant device or
10 computer by a reader associated with the terminal.

12. A method as defined in claim 8 including storing said at least one identifier at a server.

13. A method as defined in claim 12 including establishing a communication link between the terminal and the server following the inputting step.

14. A method as defined in claim 13 including generating the unique identifier by the server.

15. A method as defined in claim 1 including the step, prior to the inputting step, of providing a group of selectable promotions at the terminal, and in which the inputting step is comprised of selecting one
5 of the selectable promotions.

16. A method as defined in claim 15 including the step, prior to the step of providing a group of selectable promotions, of identifying a customer, storing a customer identifier, and then storing the

17

5 identity of the selected promotion and optionally the
identity of the promotion that is authorized in relation
to the customer identifier.

17.   A method as defined in claim 16 in which
the step of authorizing the provision of the promotion
includes comparing the identity of a promotion with a
stored identity and authorizing said promotion in the
5 event of a match.

18.   A method as defined in claim 17 in which
the identity of a promotion is comprised of a set of
numbers exposed on a scratch and win or save card.

19. A method as defined in claim 1 in which the
step of authorizing the provision of the promotion
includes comparing the identity of a promotion with a
stored identity and authorizing said promotion in the
5 event of a match.

20.   A method as defined in claim 19 in which
the identity of a promotion is comprised of a set of
numbers exposed on a scratch and win card.

21.   A method as defined in claim 1 including
authorizing provision of said promotion by at least one
of display at the terminal, providing a printout, or by
audio annunciation.

22.   A method as defined in claim 17 including
authorizing provision of said promotion by at least one
of display at the terminal, providing a printout, or by
audio annunciation.

18

23.   A method as defined in claim 16 in which
the authorizing step includes automatic selection of a
promotional value or authorized promotional entity on
matching at least one of demographics of a customer and
5   purchase history of a customer matching predetermined
demographic or purchase categories, and authorizing said
promotional value or promotional entity.

24.   A method as defined in claim 21 in which
10   the authorizing step includes automatic selection of a
promotional value or authorized promotional entity on
matching at least one of demographics of a customer and
purchase history of a customer matching predetermined
demographic or purchase categories, and authorizing said
15   promotional value or promotional entity.

25.   A method of operating an electronic
promotion system comprising:
        (a) at a terminal, generating a request to a
promotion awarding process,
5   (b) receiving the request and generating a
promotion based on at least one of chance, a
predetermined algorithm, values input at the terminal,
and the existence of a predetermined fixed promotion,
and
10   (c) authorizing provision of the generating
promotion at a terminal.

26.   A method as defined in claim 25 including
transmitting data embodying the request from the
terminal to a server, carrying out the promotion
awarding process at the server, and transmitting data
5   embodying the authorization from the server to the
terminal, and displaying the awarded promotion at the

terminal.

27.   A method as defined in claim 25, including
storing a game at the terminal, uploading game selection
values generated at the terminal to the server, and
authorizing the promotions based at least partly on the
game selection values from the server to the terminal.

28.   A method as defined in claim 25 including
providing a game to the terminal prior to authorizing
provision of the promotion to the terminal, and on
playing the game, uploading game selection values to the
5   server and authorizing the promotion based on the game
selection values.

29.   A method as defined in claim 28 including
transmitting data embodying the request from the
terminal to a server, carrying out the promotion
awarding process at the server, and transmitting data
5   embodying the authorization from the server to the
terminal, and displaying the awarded promotion at the
terminal.

30.   A method as defined in claim 29, including
providing the game by one of downloading the game from
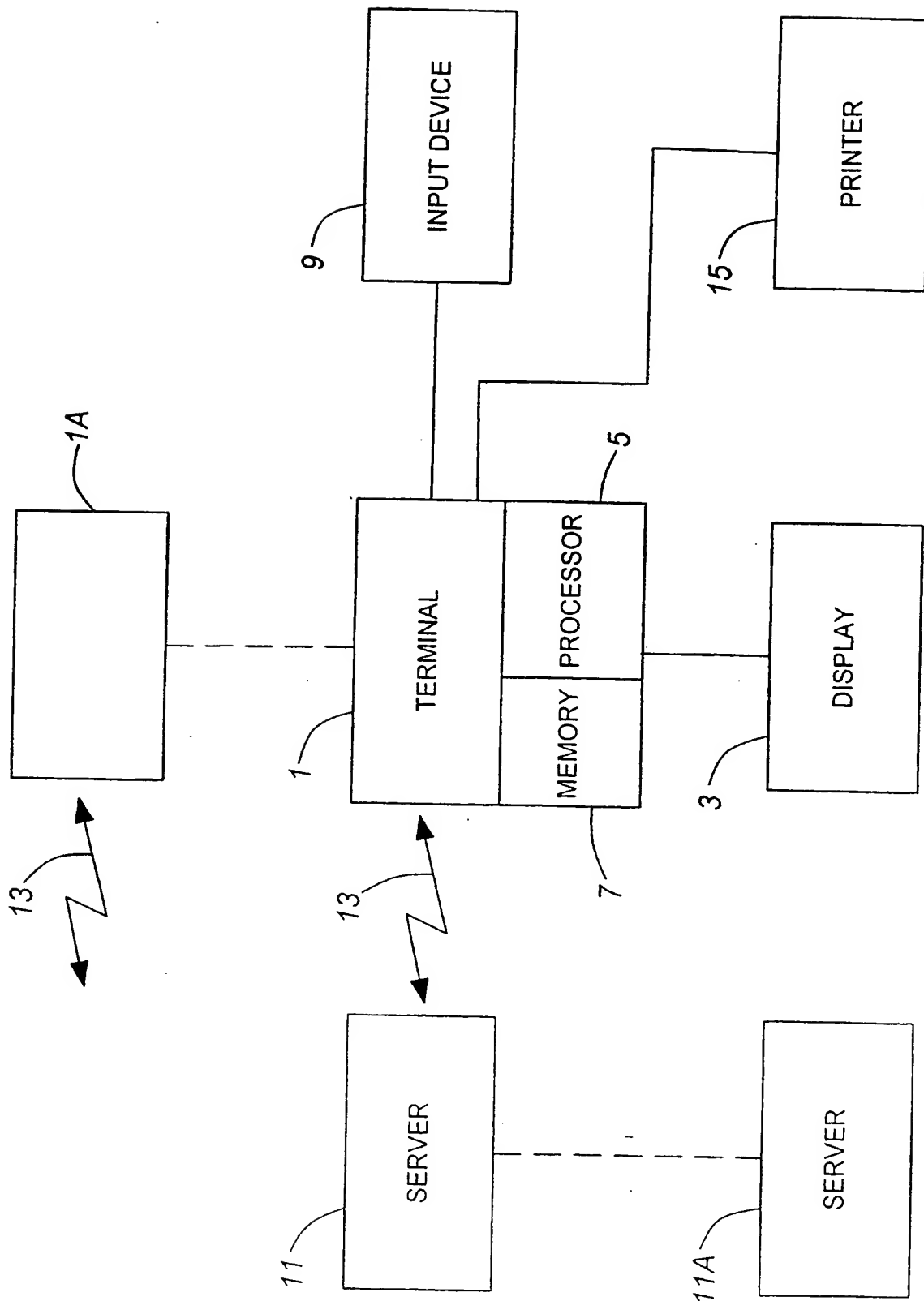the server and prestoring the game at the terminal.

FIG. 1